



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

646.3813

Job Sheet 170478



Part No: 646.3813

Job Qty: 16 ea

Part Name: AS350 Strut Bracket



Part Weight: 0 lbs

Status: Scheduled

Priority: Medium

Job Created: 1/16/18

Job Tracking No:

Due Date: 2/8/18

Created By: Linda Lacelle

Type: SOLD

Description:

Note: DWG REV N/C IPP REV:A NEW ISSUE 12-10-22 JLM VERIFIED:DD

Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Sign-off
					Setup hrs	Run Hrs	Workcenter / Supplier	Lead Time	
90	Start up Operation	16 Ea		1/24/18	0.00	0.00	Start Up Machining-1		J.C.L.
100	Bandsaw	16 pcs		1/24/18	0.00	0.69	Bandsaw1		J.C.L.
110	Mill Conv	16 pcs		1/25/18	0.00	10.19	Mill Conv 1		J.C.L.
120	QC	16 pcs		1/25/18	0.00	0.00	QC2 Machining-1		J.C.L. 18-01-30
130	QC	16 pcs		1/25/18	0.00	0.00	QC8 Machining-1		AT 18/01/31
140	Outsource	16 pcs		2/8/18			ATG001-VC	Outsource 101	AT 18/03/01
150	Packaging	16 pcs		2/8/18	0.00	0.00	Packaging2		AT 18/03/01
155	QC	16 pcs		2/8/18	0.00	0.00	QC5		38
180	Packaging	16 pcs		2/8/18	0.00	0.00	Packaging3-1	SEE 106	MAR 02 2018
190	QC21-SA	16 Ea		2/8/18	0.00	0.00	QC21		

Part Op 110 - 1-Machine per DWG

Descriptions: 140 - Issue P/O to ATG : 646.3813 Hard Anodize Black and Prime as Per Dwg 646.3800

180 - ***IDENTIFY AS PER APICAL MPP-120 BY STAMPING P# AND REV***

DAS
21
9-80

MAR 05 2018

Job Allocations

Operation	Component Part	Required	Inventory	Allocated	Std Qty
90-Start up Operation	M7075T6A0.75X0.75X0.060X0.062	2	51	0	0

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE



QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION	AGAINST DEPARTMENT/PROCESS					
	Rework ☐	Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐		
	Scrap ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐		
	Use-as-is ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐		
	Suspected Unapproved ☐	Large Fab ☐	Composite ☐	Supplier ☐			
Date : _____	Step #: _____	QTY Effective : _____			MRB (QSI042) Approval		
Description Work Order Deviation		Disposition			Completed By		
					Lead hand / Supervisor		
					Approval Verification		

Root Cause		
Environment ☐	No Re-verification ☐	Pressure/Forced ☐
Design ☐	Operator ☐	Bending ☐
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐
Equip/Tooling ☐	Supplier ☐	Cracks ☐
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐
Material ☐	Use for Testing ☐	Cuffs ☐
Internal Transport ☐	Poor Information ☐	Crushing ☐
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐
Substation ☐	Process Improvement ☐	Marks/Chatter ☐
Past Expiry Date ☐	Manufacturing Process ☐	
Misidentified ☐	Past Due ☐	OTHER : _____

Job No: 170478
Start up Operation 01/30/18

Change No: _____
Operation: _____
Revision: _____
PART NO: 646.3813
Original Serial #: S037064



AS350 Strut Bracket
S037064
AEROSPACE
DART

Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
CANADA
TEL: 1 613 632-5200
Email: sales@dartaero.com
www.dartaerospace.com

Part Specifications					
Spec No	Description	Target/Tolerance	Limits	Type	Special Comments
1	Strut Bracket	0.060Inches ± 0.010	0.070 0.050		
2	Strut Bracket	0.060Inches ± 0.010	0.070 0.050		
3	Strut Bracket	0.030Inches ± 0.010	0.040 0.020		
4	Strut Bracket	0.630Inches ± 0.010	0.640 0.620		
5	Strut Bracket	0.750Inches ± 0.010	0.760 0.740		
6	Strut Bracket	2.950Inches ± 0.010	2.960 2.940		
7	Strut Bracket	2.610Inches ± 0.010	2.620 2.600		
8	Strut Bracket	0.060Inches ± 0.010	0.070 0.050		
9	Strut Bracket	2.450Inches ± 0.010	2.460 2.440		
10	Strut Bracket	3.6Angle ± 0.5	4.1 3.1		
11	Strut Bracket	113.6Angle ± 0.5	114.1 113.1		

Plex 1/16/18 2:00 PM dart.lacelle.linda

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

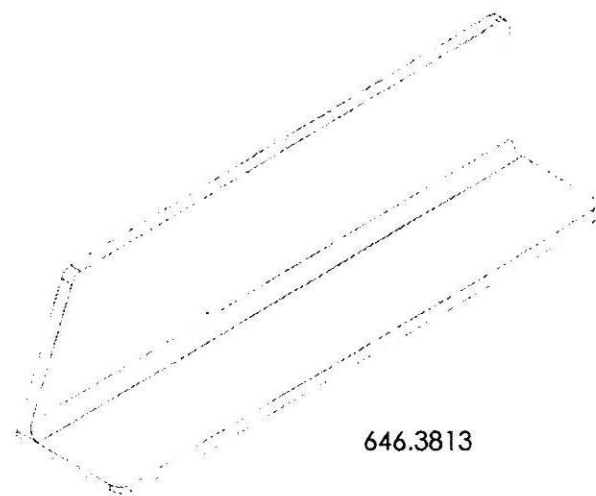
QA Closed: _____ Date: _____

Work Order update only ☐

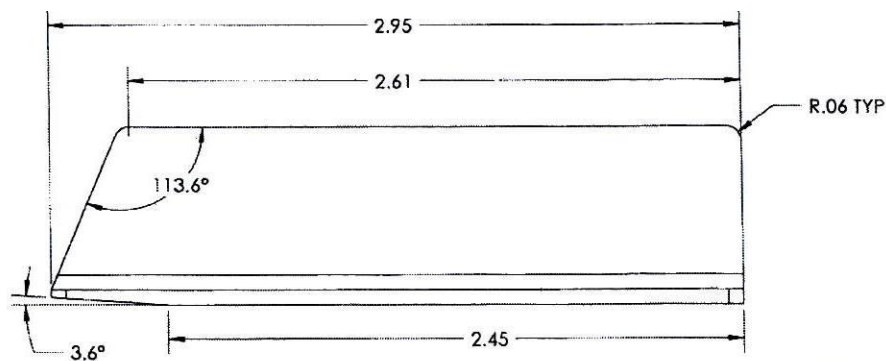
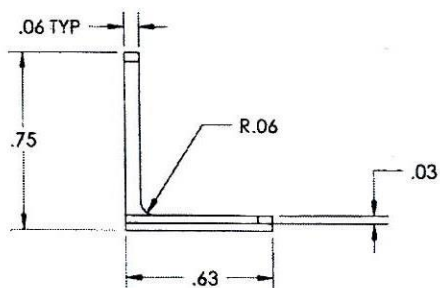
Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval		
Description Work Order Deviation				Disposition				Completed By	
								Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____							
Misidentified ☐	Past Due ☐								

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REVISIONS			
REV	DESCRIPTION	DATE	APPROVED



646.3813



NEXT ASSY (S)	ORIGINAL DATE	08-19-08	APICAL INDUSTRIES 2608 TEMPLE HEIGHTS DR. OCEANSIDE, CA. 92056-3512 (760) 724-5300		
	DRAWN BY	CHECKER			
	1. GARDNER				
	DRAWING APPROVAL				
CONTRACT NO.		BRACKETS			
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 3 PLACE DECIMALS ±.01 ANGLES ±.5°					
SCALE		NONE	SHEET 4 OF 5		

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
Description Work Order Deviation				Disposition					

Root Cause				FAULT CATEGORY			
Environment ☐	☐	No Re-verification ☐	☐	Pressure/Forced ☐	☐	Temperature/Cure ☐	☐
Design ☐	☐	Operator ☐	☐	Bending ☐	☐	Set-up ☐	☐
Doc/Data ☐	☐	Offset/Setup ☐	☐	Centre Not Concentric ☐	☐	BOM/Route ☐	☐
Equip/Tooling ☐	☐	Supplier ☐	☐	Cracks ☐	☐	Broken/Damage/Defect ☐	☐
Handling/Pre ☐	☐	Training ☐	☐	Crimp/Kink/Ripple/Wave ☐	☐	Inspection Incomplete/Unqualified ☐	☐
Material ☐	☐	Use for Testing ☐	☐	Cuffs ☐	☐	Contamination ☐	☐
Internal Transport ☐	☐	Poor Information ☐	☐	Crushing ☐	☐	Countersink ☐	☐
Tribal Knowledge ☐	☐	Rushing ☐	☐	Heat Treat ☐	☐	Cut Too Short ☐	☐
LOA ☐	☐	Product Improvement ☐	☐	Wave/Twist in Tube ☐	☐	Instructions Incomplete/Unclear ☐	☐
Substation ☐	☐	Process Improvement ☐	☐	Marks/Chatter ☐	☐	Drill Holes ☐	☐
Past Expiry Date ☐	☐	Manufacturing Process ☐	☐	OTHER : _____			
Misidentified ☐	☐	Past Due ☐	☐				



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K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER PO038921

Items										
Line Item	Job	Part	Description	Status	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
16	168945	RBH9928-12-5	Water sealant -Certificate of Conformity is required Clamp -Issue P/O to ATG : PO -ANODIZE COLOR RED, PER IAW MIL-A-8625 TYPE-2 CLASS-2, Water sealant -Certificate of Conformity is required	Firmed	2/9/18	1 pcs ✓	0 pcs 1x	1 pcs AT 18/02/11	\$7.30/pcs	\$7.30
17	170102, RB T102103-3	Adapter -Issue P/O to ATG : ANODIZE COLOR CLEAR, PER IAW MIL-A-8625F TYPE 2 CLASS 1 WATER SEAL -Certificate of Conformity is required	Firmed	2/9/18	20 pcs ✓	0 pcs 20x	20 pcs AT 18/02/11	\$3.47/pcs	\$69.40	
18	170336	RBT112800-3	PTO Seal Install Tool -Issue P/O to ATG : -ANODIZE COLOR CLEAR, PER IAW MIL-A-8625F TYPE 2 CLASS 1 WATER SEAL -Certificate of Conformity is required	Firmed	2/9/18	6 pcs ✓	0 pcs 6x	6 pcs AT 18/02/11	\$3.47/pcs	\$20.82
19	170362	RBW109-3101-58-1-7	Handle -Issue P/O to ATG : -ANODIZE COLOR BLUE, PER IAW MIL-A-8625F TYPE 2 CLASS 2, Water sealant -Certificate of Conformity is required	Firmed	2/9/18	6 pcs ✓	0 pcs 6x	6 pcs AT 18/02/11	\$13.62/pcs	\$81.72
20	170378	RBW109-3101-58-2-3	Hammer Head -Issue P/O to ATG : -ANODIZE COLOR CLEAR, PER IAW MIL-A-8625F TYPE 2 CLASS 1, Water sealant -Certificate of Conformity is required	Firmed	2/9/18	9 pcs ✓	0 pcs 9x	9 pcs AT 18/02/11	\$3.47/pcs	\$31.23
21	170475	646.3810	Bracket Issue P/O to ATG : Hard Anodize Black and Prime as per Dwg 646.3800	Firmed	2/9/18	24 pcs ✓	0 pcs 24x	24 pcs AT 18/03/01	\$7.67/pcs	\$184.08
22	170478	646.3813	AS350 Strut Bracket Issue P/O to ATG : Hard Anodize Black and Prime as Per Dwg 646.3800	Firmed	2/9/18	16 pcs ✓	0 pcs 16x	16 pcs AT 18/03/01	\$7.22/pcs	\$115.52
23	170545	RBW109-3101-58-1-7	Handle -Issue P/O to ATG : -ANODIZE COLOR BLUE, PER IAW MIL-A-8625F TYPE 2 CLASS 2, Water sealant -Certificate of Conformity is required	Firmed	2/9/18	6 pcs ✓	0 pcs 6x	6 pcs AT 18/02/11	\$13.62/pcs	\$81.72
24	170548	646.9910	Struts Issue P/O to ATG : 1-3	Firmed	2/16/17	29 pcs 16x 13	0 pcs 29x AT 18/03/01	29 pcs \$14.52/pcs	\$421.08	



A.T.G. Industries Inc.
731 Industrielle Street
Rockland, ON K4K 1T2
Canada

Ph: (613) 446-4544

Fax: (613) 446-4556

Pack List

Number: 914688

Date: 28-Feb-18

To

Dart Aerospace Ltd
1270 Aberdeen St
Hawkesbury, ON K6A 1K7

Ship To

Diane Baker
Dart Aerospace Ltd
1270 Aberdeen St
Hawkesbury, ON K6A 1K7

Ph: 613 632-9577

Fax: 613 632-1053

Ph: 613 632-9577

Fax: 613 632-1053

Terms		Ship Via	
		OUR TRUCK	
Quantity	Description		
	Please reference this document's Pack List number on all correspondences regarding this shipment. If you have any questions, please contact us.		
- 24 ea	Part: 646.3812 Gusset Bracket Hard Black Anodize per MIL-A-8625F, Type III, Class 2, .0005-.0045" (.5 - 4.5mils) Prime per MIL-PRF-23377, Type I, Class N (Customer Supplied), .0006-.0009" (.6 - .9 mils) per drawing. Job: 22461		Rev: N/C PO: PO038921 Line: 1
1 ea	Part: D4970-3 Windshield Deflector - Upper Hard Anodize, IAW MIL-A 8625 Type III Class 2, Color Black Job: 22462		Rev: C PO: PO038921 Line: 2
- 24 ea	Part: 646.3810 Bracket Hard Black Anodize per MIL-A-8625F, Type III, Class 2, .0005-.0045" (.5 - 4.5mils) Prime per MIL-PRF-23377, Type I, Class N (Customer Supplied), .0006-.0009" (.6 - .9 mils) per drawing. Job: 22481		Rev: NC PO: PO038921 Line: 21
- 16 ea	Part: 646.3813 AS350 Strut Bracket Hard Black Anodize per MIL-A-8625F, Type III, Class 2, .0005-.0045" (.5 - 4.5mils) Prime per MIL-PRF-23377, Type I, Class N (Customer Supplied), .0006-.0009" (.6 - .9 mils) per drawing. Job: 22482		Rev: NC PO: PO038921 Line: 22
- 16 ea	Part: 646.9910 Struts Hard Black Anodize per MIL-A-8625F, Type III, Class 2, .0005-.0045" (.5 - 4.5mils) Prime per MIL-PRF-23377, Type I, Class N (Customer Supplied), .0006-.0009" (.6 - .9 mils) per drawing. Job: 22484		Rev: NC PO: PO038921 Line: 24
Made in Canada.			



A.T.G. Industries Inc.
731 Industrielle Street
Rockland, ON K4K 1T2
Canada

Ph: (613) 446-4544

Fax: (613) 446-4556

Pack List

Number: 914688

Date: 28-Feb-18

To

Dart Aerospace Ltd
1270 Aberdeen St
Hawkesbury, ON K6A 1K7

Ship To

Diane Baker
Dart Aerospace Ltd
1270 Aberdeen St
Hawkesbury, ON K6A 1K7

Ph: 613 632-9577

Fax: 613 632-1053

Ph: 613 632-9577

Fax: 613 632-1053

Terms		Ship Via	
		OUR TRUCK	
Quantity	Description		
3 ea	Part: D4822-2 Upper Right Deflector Hard Black Anodize per MIL-A-8625F, Type III, Class 2, .0005-.0045" (.5 - 4.5mils) Prime per MIL-PRF-23377, Type I, Class N (Customer Supplied), .0001-.0002" (.1 - 2 mils) per drawing. Job: 22463	Rev: C	PO: PO038921 Line: 3
7 ea	Part: 647.0110 Roof Doubler Hard Black Anodize per MIL-A-8625F, Type III, Class 2, .0005-.0045" (.5 - 4.5mils) Prime per MIL-PRF-23377, Type I, Class N (Customer Supplied), .0006-.0009" (.6 - .9 mils) per drawing. Job: 22468	Rev: A	PO: PO038921 Line: 8
CERTIFICATE OF CONFORMANCE A.T.G Industries Inc. certifies that all items in this shipment conform to the requirements. Date: <u>28/2/18</u> Certified Signature: <u>[Signature]</u> Receiver Signature: _____ A.T.G Industries Inc. is AS9100 Registered and Nadcap Chemical Processing Accredited. Note: This Packing Slip may contain parts that have been PLATED. Items that are plated may be subject to natural tarnishing and it is suggested that they be inspected within 24 hours of receipt.			

Made in Canada.